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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/536,056	03/27/2000	Teppei Yokota	450100-02414	4614
20999	7590	07/08/2004	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			TRAN, TONGOC	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 07/08/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary

Application No.

09/536,056

Applicant(s)

YOKOTA ET AL.

Examiner

Tongoc Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. This office action is in response to applicant's amendment filed on 4/12/2004.

Claims 1-8, 11-15, 18-21 are amended. Claims 1-21 are pending.

Response to Arguments

2. Applicant's arguments with respect to the amended independent claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-9, 11-16, 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shikakura (U.S. Patent No. 5,594,598) in view of Akiyama et al. (U.S. Patent No. 5,812,663, hereinafter Akiyama)

In respect to claim 1, Shikakura discloses a non-volatile recording medium for recording a digital video signal, said recording medium comprising:

A block-segmenting element to segment the digital video signal into a plurality of blocks, each block having a predetermined data length selected to provide a maximum recordable time on the recording medium and a compressor to compress the digital audio signal at a compression ratio selectable in a predetermined range (Shikakura, col.

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2, lines 24-45, col. 3, lines 1-29 and col. 5, lines 31-42, a block-segmenting element is inherently required in order to generate the number of synchronizing blocks before the compression is performed).

Shikakura does not disclose but Akiyama discloses each block provide a maximum encryptable data length of the digital audio signal (Akiyama, Abstract, col. 5, lines 11-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Shikakura's predetermining data length for maximum recordable time to compress data in each block with Akiyama's teaching of implementing DES block cipher to provide maximum encryptable data length in each block for security and speed.

In respect to claim 2, Shikakura and Akiyama disclose the non-volatile record medium as set forth in claim 1. Shikakura and Akiyama do not explicitly disclose wherein the recordable capacity of the non-volatile recording medium is 64 Mbytes. However, non-volatile memory such as magnetic or optical disk having memory capacity of 64 Mbytes is old and well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to record digital audio or video signal in 64 megabytes because audio or video signal requires more memory capacity.

In respect to claim 4, Shikakura and Akiyama disclose the non-volatile record medium as set forth in claim 1. Shikakura and Akiyama further disclose wherein the data length of which the digital audio data is encoded is a multiple of 8 or 16 bits (col. 7, lines 28-36).

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In respect to claim 5, Shikakura and Akiyama disclose the non-volatile record medium as set forth in claim 1. Shikakura and Akiyama do not disclose wherein the maximum recordable time on the recording medium is between 60 and 74 minutes. However, maximum recordable time of a recording medium set between 60 and 74 minutes is old and well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teaching of Shikakura and Akiyama's maximum recording capability to be 60 minutes or 74 minutes in order to set the maximum recordable time between general accepted industry standards.

In respect to claims 6 and 7, Shikakura and Akiyama disclose the non-volatile recording medium as set forth in claim 1. Akiyama discloses the predetermined data length selected in consideration of the record unit of the non-volatile memory (Shikakura, col. 2, lines 24-45) but does not explicitly disclose wherein the non-volatile recording medium is a flash memory. However, recording digital data in a flash memory is old and well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement flash memory with the teaching of Shikakura and Akiyama's magnetic tape teaching for the benefit of its size and durability.

In respect to claim 8, the claim limitation is a method claim which is substantially similar to recording medium of claim 1. Therefore, claim 8 is rejected based on the similar rationale.

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In respect to claims 9 and 12-14, the claim limitations are method claims which are substantially similar to recording medium claims 2 and 5-7. Therefore claims 9 and 12-14 are rejected based on the similar rationale.

In respect to claims 11 and 18, the claim limitations are method and apparatus claims which are substantially similar to claims recording medium claim 4. Therefore, claims 11 and 18 are rejected based on the similar rationale.

In respect to claim 15, the claim limitation is an apparatus claim which is substantially similar to recording medium claim 1. Therefore, claim 15 is rejected based on the similar rationale.

In respect to claims 16, 19-21, the claim limitations are apparatus claims which are substantially similar to recording medium claims 2, 5-7. Therefore claims 16, 19-21 are rejected based on the similar rationale.

4. Claims 3, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shikakura (U.S. Patent No. 5,594,598) and Akiyama (U.S. 5,812,663) as applied to claim 1 above, and further in view of Takahashi et al. (U.S. Patent No. 6,453,120 hereinafter Takahashi).

In respect to claim 3, Shikakura and Akiyama disclose the non-volatile record medium as set forth in claim 1. Shikakura and Akiyama teach compressing at various compression rate but do not explicitly disclose wherein the predetermined range of the compression ratio is from 1/8 to 1/43. However, Takahashi discloses compression rate can be selected from among, for example, 1/4, 1/8, 1/16 and 1/32 (see Takashashi, col.

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10, lines 40-54). However, it would have been obvious to one of ordinary skill at the time the invention was made to modify the teaching of compressing audio and video signal at various rate taught by Shikakura and Akiyama and selecting compression ratio of 1/4 to 1/32 taught by Takashashi to include the compression ratio from 1/8 to 1/43 as a matter of design choice to choose between speed and quality.

In respect to claims 10 and 17, the claim limitations are method and apparatus claim which are substantially similar to claims recording medium claim 3. Therefore, claim 10 and 17 are rejected based on the similar rationale.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (703) 305-7690. The examiner can normally be reached on 8:30-5:00 M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Tongoc Tran
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TT

 June 23, 2004


MATTHEW SMITHERS
PRIMARY EXAMINER
Art Unit 2137